

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010379**Date Inspected:** 20-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Crossbeams and subassemblies**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB2

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB3

This crossbeam appears to be complete and has been loaded on the ship.

OBG CROSS BEAM CB4

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

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OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed ZPMC Magnetic particle Testing (MT) technician MT various repaired areas in this crossbeam. No other significant work was observed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB8

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB9

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB11

This QA observed ZPMC qualified welding personnel identified as 215185 and 217185 perform FCAW welding on weld joint identified as CB202A-011-017. ZPMC QC identified as Mr. Zheng Zhi Wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 215390 and 215009 perform FCAW welding on weld joint identified as CB202A-011-005. ZPMC QC identified as Mr. Zheng Zhi Wei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

OBG CROSS BEAM CB12

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This QA observed ZPMC qualified welding personnel identified as 069118 perform FCAW welding on weld joint identified as CB201G-036-081. ZPMC QC identified as Mr. SunYan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

OBG CROSS BEAM CB13

This QA observed the contractors personnel fitting and tack welding floor beam sections to the east side panel. No other significant work was observed during the time QA was present.

OBG CROSS BEAM CB14

This QA observed the contractors personnel fitting and tack welding the intermediate panel to the deck panel. No other significant work was observed during the time QA was present.

OBG CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB16

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG subassembly bay 1

This QA observed ZPMC qualified welding personnel identified as 054460 perform FCAW welding on counterweight box identified as CW002B weld joints identified as CW002B-PP092-002 and 003. ZPMC QC identified as Mr. Tian Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F-1.

During random visual inspection of counter weight box CW002B this QA observed various outside corner welds that did not appear to meet the weld profile requirements specified in the contract documents. The attached photos of these welds are intended to capture the in-process workmanship being performed on this component.

OBG subassembly bay 2

This QA observed ZPMC qualified welding personnel identified as 058245 perform FCAW welding on FL3 floor beam identified as FB3054A weld joints identified as FB3054-001-104 and 105. ZPMC QC identified as Mr. Zhan Hai Feng was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

During random visual inspection of floor beam FB3054A this QA observed various cut edge notches 4mm to 5mm in depth. These notches were observed on both edges of pcmk X3186B. The attached photos of these notches are intended to capture the in-process workmanship being performed on this component.

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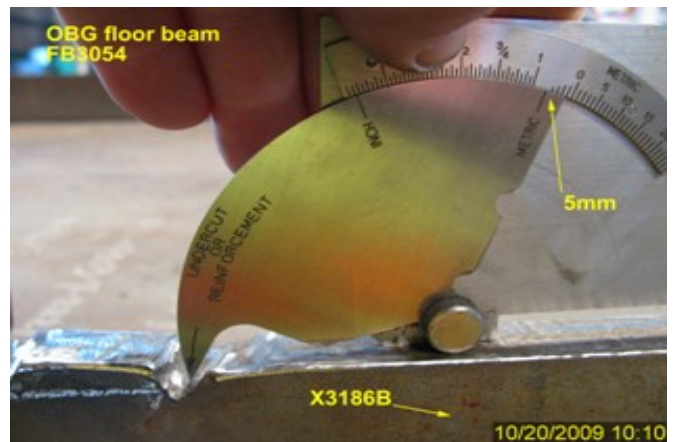
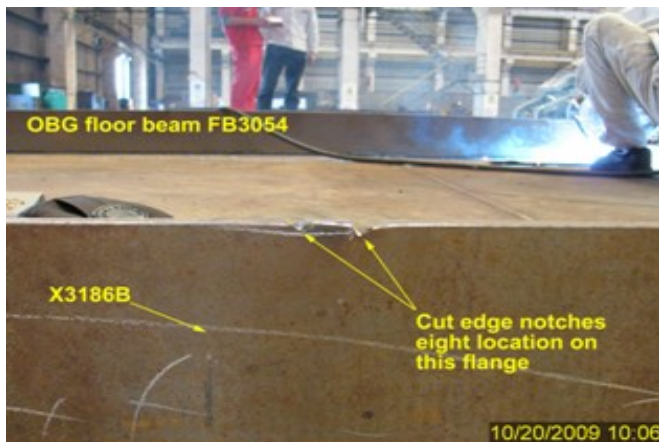
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OBG subassembly bay 5

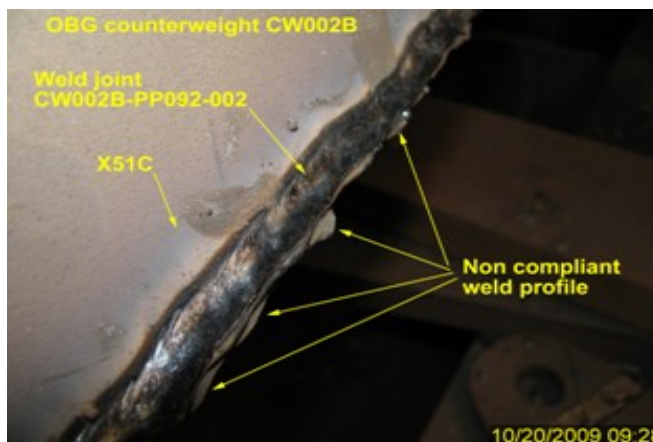
This QA observed ZPMC qualified welding personnel identified as 217805 perform FCAW welding on traveler rail identified as 10TR3 weld joints identified as 10TR3-035-010. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U5-F.

This QA observed ZPMC qualified welding personnel identified as 020433 perform FCAW welding on traveler rail identified as 10TR3 weld joints identified as 10TR3-036-014. ZPMC QC identified as Mr. Meng Lin Nan was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U5-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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Only general conversation was held between QA and QC concerning this project..

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer